

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 Broadway New York, New York 10007-1866

SUBJECT: Request for a Time Critical Removal Action at the former W.R. Grace/Zonolite

Site in Hamilton Township, Mercer County, New Jersey

ACTION MEMORANDUM

FROM: Michael Ferriola, On-Scene Coordinator

Response and Prevention Branch

TO: George Pavlou, Director

Emergency and Remedial Response Division

THRU: Bruce Sprague, Chief

Response and Prevention Branch

Site ID: SK

CERCLIS ID No. NJD 067 387 472

I. PURPOSE

The purpose of this action memorandum is to request and document approval to expend up to \$1,924,000 to conduct a time-critical removal action at the W.R. Grace/Zonolite Site (Site) located in Hamilton Township, Mercer County, New Jersey. The proposed removal action will address asbestos contaminated soil on a portion of this approximate 8.4 acre site.

This removal action addresses the need to mitigate the potential threats to the local population, current site employees, and the environment posed by fibrous amphibole asbestos that was released into the environment from the former W.R. Grace/Zonolite processing of vermiculite ore and disposal of associated waste products at this Site. High concentrations of amphibole asbestos posing a public health threat have been detected on the former W.R. Grace/Zonolite Site at concentrations as high as forty percent.

As part of a national evaluation of facilities that received vermiculite ore from the Libby, Montana mine owned by W.R. Grace & Co. (W.R. Grace), the U.S. Environmental Protection Agency (EPA) Region 2 Response and Prevention Branch (RPB) conducted an initial site visit on February 24, 2000. The proposed removal action will address immediate health threats identified on the former W.R. Grace/Zonolite property during various EPA sampling events from

File:W/Ferriola\FY2003\wrgrace-zonolite action memo.wpd 2ERR:RPB:FERRIOLA;ce:10/23/02

2ERR-RPB 2ERR-RPB 2ERR-RPB 2ERR-RAB 2ORC-NYCSFB 2ORC-NJSFB 2ORC-NYCSFB ERRD **ERRD** MELLOTT FERRIOLA DALOIA SPRAGUE ZACHOS CARR KARLEN MCCABE **PAVLOU**



October 2000 through August 2001. EPA plans to conduct additional sampling on the adjacent Amtrak rail yard property to the northeast and an adjoining lot to the northwest owned by the Hamilton Transit Corporate Center, which may have been impacted by railroad delivery of vermiculite and processing operations at the Site. This subsequent sampling, analysis and evaluation may identify additional time-critical threats which will need to be addressed.

This Site is not on the National Priorities List (NPL) and there are no nationally significant, precedent setting issues associated with this Site.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description and Background

1. Removal Site Evaluation

Between October 2000 and August 2001, the RPB conducted sampling investigation activities at the Site to determine the potential health threat posed by amphibole asbestos-containing materials, which were generated at the former W.R. Grace/Zonolite facility. Soil contaminated with asbestos has been detected at levels as high as forty percent in surface soils.

This industrial site consists of two primary parcels of land, one 4.24 acre parcel owned by MLB Properties, LLC (MLB) and presently leased to an affiliated company, Accurate Document Destruction, Inc. (ADDI), and the other owned by Amtrak railroad. The overall site is approximately 8.4 acres and contains a large one-story brick building with an office portion, a warehouse structure housing paper and cardboard recycling machines, and a loading dock for off-site shipment of baled paper and cardboard products. The remaining portions of this industrial property are a parking lot and a heavily wooded area with dense undergrowth vegetation. The Site is predominately in an industrialized setting with the nearest residential community 0.25 - 0.40 miles to the west. There are approximately 742 people (87% white, 8.2% African-American, 4.5% Hispanic, and 3.5% Asian) within a one-half mile radius of the Site. A total of 9080 people live within a one mile radius of the Site. This includes 77.2% white, 16.8% African-American, 8.6% Hispanic, 2% Asian, and 3.9% other races. The property itself is unsecured (unfenced) and trespassers could easily enter the Site.

As part of a national evaluation of facilities that received vermiculite ore from the Libby, Montana mine owned by W.R. Grace, the RPB conducted an initial site visit on February 24, 2000. The initial investigation consisted of a brief inspection of the former processing building and property, discussions with MLB, and interviews with local officials and some businesses currently operating in the area. During the initial investigation, EPA observed both exfoliated vermiculite and vermiculite concentrate (ore) in the surface soils around the building, along the railroad tracks, and in the truck parking lot.

The initial sampling event was conducted by EPA's Environmental Response Team (ERT) on October 2000. Samples were collected from the surface (0-3") and subsurface (18-24") at nine locations and at an additional six locations for surface samples only. All of the samples collected were analyzed by both polarized light microscopy (PLM) and transmission electron microscopy (TEM) via NYS ELAP 198.4 methodologies. These samples were found to contain concentrations of up to 2.9% tremolite asbestos and up to 3.9% chrysotile asbestos.

In March 2001, the EPA-ERT returned to the Site to perform additional sampling of selected surface and subsurface grid locations previously sampled during the October 2000 investigation. Thirteen samples were collected from selected grid locations and concentrations of up to 4.5% tremolite asbestos and up to 2.7% chrysotile asbestos were detected.

The findings from the October 2000 and March 2001 sampling events triggered a more intensive sampling investigation. Sampling was conducted by EPA's Removal Support Team (RST) in August 2001. A land survey was first performed by a licensed surveyor of the entire 8.4 acre property encompassing Block 1581/Lot 19.01, the MLB parcel, and Lot 19.02, the Amtrak parcel. A 50 foot grid pattern was established and in excess of 220 surface and subsurface samples were collected. All samples were analyzed by California Air Resources Board (CARB) 435 PLM methodology and a select portion were analyzed by TEM methods. Samples were not collected in areas of asphalt or concrete pads. The grid was also extended 50 feet beyond the Lot 19 property boundary on to the adjacent Block 1508/Lot 17, an additional Amtrak parcel known as the "Millham yard" property. Samples were collected from the surface and 18-24" below grade at each node. Sample results have shown concentrations of asbestos (tremolite/actinolite and/or chrysotile) as high as 40% in the surface soils. Each of the grid nodes and corresponding asbestos concentrations have been identified on a scaled map and are identified as Figure 1. Approximately 25% of the grid locations have concentrations of asbestos greater than or equal to 1%. A majority of the elevated readings (1 - 40%) are concentrated on the eastern portion of the property.

Two of the former workers from the Site have been contacted concerning past operational practices by W.R. Grace. Both workers have indicated that the interior of the plant was extremely dusty during the exfoliation and Monokote® (structural fireproofing trade name) mixing operations. They also stated that a form of respiratory protection was available but not often used.

Asbestos is a hazardous substance as defined by 40 CFR Section 302.4 of the National Contingency Plan (NCP). Tremolite/actinolite (amphibole) asbestos and chrysotile (serpentine) asbestos have been detected at this Site. Asbestos is of potential concern because chronic inhalation exposure to excessive levels of asbestos fibers suspended in air can result in lung disease such as asbestosis, mesothelioma and lung cancer. Exposures via ingestion and dermal contact are considered to be of lesser concern. Characteristics of amphibole asbestos that are of concern are fibers that are greater than 5 microns in length and have an aspect ratio of greater than 5 to 1.

2. Physical Location

The former W.R. Grace/Zonolite facility is located at 35 Industrial Drive, Hamilton Township, Mercer County, New Jersey 08619. The property is identified on the current Hamilton Township tax map as Block 1581/Lot 19. The former block/lot designation was Block 46/Lot 3. This industrial site consists of two parcels of land, one owned by MLB and presently leased to ADDI, and the other currently owned by Amtrak. The overall site is approximately 8.4 acres and contains a large one-story brick building with an office portion, a warehouse structure housing paper and cardboard recycling machines, and a loading dock for off-site shipment of baled paper and cardboard products. The remaining portions of this industrial property are a parking lot and a heavily wooded area with dense undergrowth vegetation.

The property formerly leased by W.R. Grace consisted of 8.4 acres and has since been subdivided into two parcels. One parcel, now identified as Lot 19.01, is 4.24 acres and is owned by MLB. The other parcel, Lot 19.02, is 4.17 acres and is still owned by Amtrak railroad. The properties are bordered on the east by railroad tracks, the Amtrak "Millham yard" (Block 1508/Lot 17) to the north and east, a vacant lot to the west, and commercial buildings and other industrial properties to the south and southwest.

Over the time period of interest (1948-1994), this former vermiculite expansion plant has had several addresses, including: 10 Industrial Drive, 15 Industrial Drive, 31 Industrial Drive, and 336 Whitehead Road. As per information received from W.R. Grace, "the above addresses all represent the same location and the confusion arises from the fact that the leased property was located within the repair yards of the Pennsylvania Railroad Company, and there was no real existing address." The current and correct address is 35 Industrial Drive, Hamilton Township, New Jersey, 08619.

The Zonolite Company originally leased the Site property from Penn Central Transportation Corp. (Penn Central) for the time period 1948 - 1963. W.R. Grace subsequently acquired the Zonolite Company through a merger in April 1963, while also leasing the same Penn Central property at 35 Industrial Drive from 1963 to 1994. Both the Zonolite Co. and W.R. Grace utilized the Site to make vermiculite-based products such as structural fireproofing, thermal insulation for masonry products, lightweight concrete aggregates, and horticultural vermiculite. Most of the raw vermiculite concentrates (unexpanded) were received from the Zonolite/W.R. Grace mine in Libby, Montana.

3. Site Characteristics

The Site consists of two primary parcels of land, one owned by MLB and presently leased to ADDI, and the other owned by Amtrak railroad. The overall site is approximately 8.4 acres and contains a large one-story brick building with an office portion, a warehouse structure housing paper and cardboard recycling machines, and a loading dock for off-site shipment of baled paper

and cardboard products. The remaining portions of this industrial property are a parking lot and a heavily wooded area with dense undergrowth vegetation. Additional parcels, including

Block 1581/Lot 25 and Block 1508/Lot 17, where additional asbestos sampling is required, may also be included in the Site. The Site is predominately in an industrialized setting with the nearest residential community 0.25 - 0.40 miles to the west. There are approximately 742 people (87% white, 8.2% African-American, 4.5% Hispanic, and 3.5% Asian) within a one-half mile radius of the Site. A total of 9080 people live within a one mile radius of the Site. This includes 77.2% white, 16.8% African-American, 8.6% Hispanic, 2% Asian, and 3.9% other races. These figures are in accordance with the 1990 US Census. Adding the racial population statistics will produce a sum in excess of 100%. This may be due to individuals reporting themselves as belonging to two or more backgrounds. Figure 5 graphically depicts the buffer zones around the Site and demographic statistics for these zones.

The W.R. Grace/Zonolite facility processed vermiculite ore that was shipped from the mine in Libby, Montana. The vermiculite ore body in Libby, Montana also contained amphibole asbestos fibers of the tremolite-actinolite-richterite-winchite solid solution series (herein referred to as amphibole asbestos) (Bureau of Mines Monograph, 1928). Unlike the commercially exploited chrysotile asbestos, the tremolite-actinolite material has never been used commercially on a wide scale, and for most of the mine's operating life was considered a contaminant. The commercially exploited vermiculite was used in a variety of insulation products and construction materials, as a carrier for fertilizer and other agricultural chemicals, and as a soil conditioner.

At the mine in Libby, Montana, the vermiculite ore was strip mined using conventional equipment and then processed in an on-site dry mill to remove waste rock and overburden (beneficiation). Once beneficiated, the processed ore was trucked to a screening plant, which separated the milled ore into five size ranges for use in various products. From there, the material was shipped across the country, predominantly by rail, for either direct inclusion in products, or for expansion (also known as exfoliation) prior to use in products.

The Site in Hamilton Township, New Jersey received Libby ore by rail in nominal 100 ton capacity hopper rail cars. W.R. Grace operated three vermiculite expanding furnaces and one product mixer for the manufacture of vermiculite-based products, including structural fireproofing, thermal insulation for masonry, lightweight concrete aggregates, and horticultural vermiculite.

The vermiculite concentrate, or raw ore, was stored in a series of wooden bins inside the building during the approximate time period of 1951 - 1973. Then, in 1973, six - 200 ton capacity steel upright silos were erected on the outside of the northeastern corner of the building. The vermiculite concentrates were unloaded from the bottom of the hopper cars into an under track screw conveyor which moved the concentrate to a bucket elevator. The bucket elevator lifted the concentrates and discharged them through a distributor to the silos. The silos were dismantled and removed upon closure of the facility in 1994.

Expansion of the raw ore occurred inside the building at 35 Industrial Drive. Expansion was accomplished by heating the ore, usually in a dry kiln, to approximately 2000°F, which boiled the water trapped in the crystalline matrix of the vermiculite, thus expanding the material by a factor of 10 to 15 fold. The waste product from the expansion process contained high

concentrations of amphibole asbestos. Two primary types of waste products were generated; they were known as "Stoner Rock" and baghouse fines. The stoner rock was produced as a result of the raw vermiculite ores which did not expand or exfoliate. The baghouse fines were collected as a dust particle in the furnace vent system. Based upon historical aerial photography from the time period 1961 - 1970 and current sampling data, some of these waste materials appeared to be disposed of outside the building.

A structural fireproofing (Monokote®) was also produced using a dry mixture of exfoliated vermiculite, gypsum, cellulose, glass fibers and a powdered surfactant. Prior to 1973, the fire protection product formulation contained chrysotile asbestos. Baghouse fines from this mixing operation were also collected as wastes.

4. Release or Threatened Release Into the Environment of a Hazardous Substance, or Pollutant or Contaminant

Asbestos is a hazardous substance as defined by 40 CFR Section 302.4 of the NCP. As a result of the presence of asbestos in surface and subsurface soils at the Site, there has been an actual and/or threatened release of hazardous substances into the environment. Amphibole asbestos and serpentine asbestos have been detected at this Site. Asbestos is of potential concern because chronic <u>inhalation</u> exposure to excessive levels of asbestos fibers suspended in air can result in lung disease such as asbestosis, mesothelioma, and lung cancer. Exposures via ingestion and dermal contact are considered to be of lesser concern. Characteristics of amphibole asbestos that are of concern are fibers that are greater than 5 microns in length and have an aspect ratio of greater than 5 to 1.

Substances Identified

Statutory Source for Designation as a Hazardous Substance

Asbestos

CWA § 307(a), CAA § 112

The route of exposure that represents the greatest health concern is the inhalation of airborne fibers, dispersed from soil by the action of pedestrian or vehicular traffic and wind dispersion. In addition to the dispersion of fibers into the air, the frictional forces of foot and vehicular traffic on these surfaces would be expected to facilitate the breakdown of the amphibole asbestos bundles into smaller and more respirable fibers over time. Based upon analytical data from the previous sampling events, the estimated volume of asbestos contaminated soil is 6300 yd³. This is the proposed minimum amount of contaminated soil which would need to be excavated and properly disposed of to be protective of human health. Figure 2 identifies the proposed excavation areas.

5. NPL Status

The Site is not on the NPL and has not been proposed for NPL listing.

6. Maps, Pictures and other graphic representations

See various Attachments.

B. Other Actions to Date

1. Previous Actions

Other than the removal site assessment activities listed in Section II.A.1., Removal Site Evaluation, and the installation of high visibility fencing by EPA in May 2002, no other actions have been performed by EPA Region II.

In 1995, a Preliminary Assessment/Site Investigation (PA/SI) was performed by a consultant (Environmental Resources Management, Inc (ERM)) hired by W.R. Grace. Based upon this report and in accordance with the New Jersey Industrial Site Recovery Act (ISRA) N.J.S.A. 13:1K-6, no further action (NFA) was approved by the New Jersey Department of Environmental Protection (NJDEP) on November 15, 1995.

2. Current Actions

There are no current removal activities being conducted by EPA at this time.

C. State and Local Authorities' Role

1. State and Local Actions to Date

In 1995, a PA/SI was performed by the ERM consultant hired by W.R. Grace. Based upon this report and in accordance with ISRA N.J.S.A. 13:1K-6, no further action (NFA) was approved by the NJDEP on November 15, 1995 (See description below). The ERM report stated that "only trace amounts (0.3 - 1.0% by weight) of asbestiform tremolite (asbestos) may be present because the W.R. Grace & Company mining and milling process used in Montana significantly reduced the tremolite content in the vermiculite concentrate. In addition, the vermiculite concentrate was treated with a vegetable oil dust suppressant which significantly reduced the potential for the release of airborne fibers. Finally, the Montana source provided 70-80% of the raw material from 1988 - 1990 and less than 10% of the raw material for 1991. Usage of the Montana source continued to decrease until 1993 when all of the raw material was from South Carolina. Thus, any vermiculite present on-site cannot be viewed as asbestos containing material".

It is EPA's viewpoint that the information described above, as contained in the PA/SI, is inaccurate for the following reasons:

- EPA sampling events conducted during the time period October 2000 August 2001
- have detected tremolite asbestos greater than 1% and at levels up to 40% in the soil.

- Although the vermiculite concentrate may have been treated with a vegetable oil suppressant, upon exfoliation in the furnaces, the oil suppressing characteristics would have been driven off by the high temperatures (2000°F) required in the exfoliation process.
- Information received by the EPA, as provided by W.R. Grace, lists shipments totaling 357,724 tons of vermiculite concentrate received at the Hamilton Township location from 1957 through 1991. Shipments of vermiculite concentrate continued to be received from Montana until about 1991, at which time the Libby mine closed and ceased shipments.

2. Potential for Continued State/Local Response

State and local government agencies are not able to undertake timely response actions to eliminate the threats posed by the Site. The state and local governments do not have the resources to conduct the required cleanup actions. However, both organizations will support EPA during this removal action.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health or Welfare

As a result of an actual and/or threatened release, the threat of exposure to current employees at the Site, the work force population in the immediate vicinity and nearby residents, exists through direct contact and subsequent inhalation of amphibole asbestos fibers. The conditions at the Site present an imminent and substantial threat to human health and the environment and meet the criteria for initiating a removal action under Section 300.415(b)(2) of the NCP. The following factors from §300.415(b)(2) of the NCP form the basis for EPA's determination of the threat presented, and the appropriate action to be taken:

- (i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants; The high concentrations of asbestos found in both surface and subsurface soils indicate that the human exposure pathway exists. The immediate surrounding area is an industrial setting with nearby residential communities within approximately 0.25-0.40 miles. Air dispersion of asbestos fibers could potentially impact both the immediate industrial community and the adjacent residential communities.
- (iv) <u>High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;</u> Vermiculite, in both the expanded and unexpanded form are readily visible at the surface on this property and the adjacent "Millham yard" property. Surface and subsurface soils contain high measured asbestos levels scattered widely throughout both of

the properties. There are several pathways by which these asbestos fibers can become entrained in air leading to inhalation exposures. Contaminated soils can easily be tracked into buildings or off the contaminated properties by truck, automobile, or pedestrian traffic; and then through wind dispersion become respirable dust. Wind, particularly in dry summer months, can lead to the migration of fine asbestos fibers from contaminated surface soils. Heavy rainfall and snow

melt would also tend to wash the fibers from the surface soils onto the adjacent downstream properties where they could also become airborne during the dry seasons.

Currently, EPA has not established, under any of its regulatory programs, an asbestos level in soil below which an exposure does not pose a risk. The 1% cut-off level for regulation under the Toxic Substances Control Act abatement program was established on the basis of analytical capability at the time, and was not established based on the level of risk represented. To the contrary, at Superfund sites in California, EPA Region IX found in certain settings that concentrations of asbestos less than 1% posed unacceptable inhalation risks when subject to disturbance by traffic.

- (v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; The warmer temperatures and drought conditions the Northeast has been experiencing will contribute to the migration of asbestos-containing soils. As soils dry out, they are more likely to be transported by wind, causing the asbestos to become airborne and available for inhalation. In the spring time, snow melt, rainfall, or other forms of run-off inducing events will tend to spread the contamination further from the Site to the adjacent properties.
- (vii) The availability of other appropriate federal or state mechanisms to respond to the release; No other Local, State, or Federal agency is in the position or currently has the resources to independently implement an effective response action to address the on-going threats presented at this Site. EPA will conduct its actions in cooperation with State and local authorities.

B. Threats to the Environment

The Site investigation has not proceeded far enough to know if the asbestos contamination is a threat to animals, water, and other parts of the environment. Asbestos is primarily a threat to human health.

IV. ENDANGERMENT DETERMINATION

Asbestos is a generic term for a group of six naturally-occurring fibrous silicate minerals. The predominant fibrous nature of minerals found at the W.R. Grace/Zonolite Site are of the tremolite-actinolite solid solution series (referred to in this Action Memo as amphibole asbestos). Asbestos can cause asbestosis and is a recognized human carcinogen, causing lung cancer and mesothelioma, a lethal neoplasm of the lining of the chest and abdominal cavities. Cancer of the larynx and esophageal lining have also been associated with exposure to asbestos. Commercial forms of asbestos have been found to be carcinogenic in experimental animals.

An investigation is currently being undertaken by the Agency for Toxic Substances and Disease Registry (ATSDR) to determine if these asbestos related diseases have been found, to an unprecedented extent among former plant workers, their families, and to nearby residents with no known occupational or family connection to the vermiculite processing operations in Hamilton Township, New Jersey. Initial interviews by EPA with former plant workers indicate some anecdotal incidence of asbestos-related injuries.

Actual and/or threatened releases of asbestos from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed Action Description

To mitigate the threat to the public health and welfare or the environment posed by the asbestos present in surficial and subsurface soils, the proposed removal actions are outlined below. The removal will involve the following:

- Removal and off-site disposal of large trees and vegetative brush in the proposed excavation areas;
- excavation and off-site disposal of asbestos-contaminated soils at an EPA-approved
- off-site disposal facility;
- personal and ambient air sampling during removal activities;
- implementation of engineering measures to control dust during the cleanup (dust suppression with water);
- analysis of bulk asbestos samples using standard PLM methods. Supplement PLM analysis with TEM for samples with lower concentrations of asbestos to assess whether contamination is present and whether sufficient excavation has occurred;
- backfill excavated areas with clean soil and dense grade aggregate in parking lot areas;
- re-grade and compact all disturbed areas to allow proper water drainage, and restore property with appropriate vegetation and/or asphalt, to original pre-removal condition.

This removal action is estimated to take several months to complete, after mobilization of support facilities. Final restoration activities, *i.e.* tree planting, *may not* be able to be completed at the conclusion of final grading activities. This activity will be dependent upon the vegetative growing season for the MidAtlantic states.

For the purposes of this removal action, the cleanup goal will be soils contaminated with asbestos at levels 1% or greater. The excavation depth is estimated to be approximately 24 inches.

2. Contribution to Remedial Performance

It is anticipated that EPA's removal activities will eliminate the immediate public health threat and potential environmental threats posed by the fibrous amphibole asbestos (tremolite and actinolite) and serpentine asbestos (chrysotile).

In accordance with Section 300.415(1), EPA will pursue appropriate arrangements for

post-removal site controls at this Site to ensure the long-term integrity of the removal. The proposed removal action should compliment and contribute to the overall success of any remedial actions in the future.

3. Description of Alternative Technologies

Alternative technologies will be considered to the extent that they prove to be cost effective, efficient, and consistent with the NCP.

4. Engineering Evaluation/Cost Analysis (EE/CA)

Due to the time critical nature of this removal action, an EE/CA will not be prepared.

5. Applicable or Relevant and Appropriate Requirements (ARARs)

ARARs within the scope of this removal action, which pertain to the excavation of asbestos-containing materials, and transportation and disposal of asbestos, will be attained to the extent practicable.

As this cleanup is being conducted as a Time-Critical Removal Action, all Federal and State ARARs may not have been identified at this time. In accordance with the NCP, all ARARs for the Site will be attained to the extent practicable, given the scope of the project and the urgency of the situation as they are identified.

6. Project Schedule

Once funding is approved through this Action Memorandum, the removal action will be initiated shortly. Tree removal and excavation will begin immediately following establishment of the site support zone and ancillary facilities (*i.e.* office trailer, electric and phone service). Excavation and off-site disposal, followed by backfilling and restoration, are expected to last several months.

B. Estimated Costs (rounded to the nearest thousand)

A summary of the funding required for this action is presented below. These costs are being estimated anticipating that the project will need to be performed as a fund lead action.

EXTRAMURAL COSTS

Regional Allowance Costs (ERRS) Other Extramural Costs (RST)	\$ 1,378,000 \$ 75,000
TOTAL EXTRAMURAL	\$ 1,453,000
INTRAMURAL COSTS	
Intramural Direct Costs Intramural Indirect Costs	\$ 50,000 \$ 100,000
TOTAL INTRAMURAL COSTS	\$ 150,000
TOTAL EXTRAMURAL & INTRAMURAL COSTS	\$ 1,603,000
CONTINGENCY (20% of Total Extra/Intramural costs rounded to the nearest thousand)	\$ 321,000
TOTAL PROJECT CEILING	\$ 1,924,000

A detailed cleanup contractor cost breakdown is available as Attachment 1.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed action will increase public health risks to current on-site workers and the local population/environment, posed by soils contaminated with amphibole and serpentine asbestos fibers existing at the Site.

VII. OUTSTANDING POLICY ISSUES

Asbestos removal actions have been completed in Region II, and around the country at numerous removal sites which were initiated under Section 300.415 of the NCP. This removal does not set a precedent or constitute a nationally significant issue. Because of the potentially broad impact of the vermiculite ore with high levels of amphibole asbestos mined from the Libby, Montana deposits, EPA Region II is coordinating with EPA Headquarters and other regions to assure a consistent approach to vermiculite issues.

VIII. ENFORCEMENT

On May 29, 2002, a combined notice of potential liability and request to perform the removal action was sent to MLB, ADDI, Amtrak, W.R. Grace and American Premier Underwriters, Inc., the successor to Penn Central. For administrative purposes, additional information concerning the enforcement strategy for this Site is contained in the attached Enforcement Confidential Addendum, Attachment 2. The On-Scene Coordinator will work with the Office of Regional Counsel, the Removal Action Branch Enforcement Team, the Emergency and Remedial

Response Division (ERRD) Integration Manager, and the Region VIII Office of Regional Counsel on enforcement issues.

IX. RECOMMENDATION

This decision document represents the selected removal action for the W.R. Grace/Zonolite Site, located in Hamilton Township, Mercer County, New Jersey, developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the Site. Conditions at the Site meet the NCP §300.415(b)(2) criteria for a removal action, and your approval is recommend. The total project ceiling for this removal action, if approved, will be \$1,924,000 of which \$1,378,000 will come from the FY-2003 Advice of Allowance. Please indicate your approval for the authorization of funding for the W.R. Grace/Zonolite Site, as per current delegation of authority, by signing below.

APPROVAI	J	Date:		
	George Pavlou, Director			
	Emergency and Remedial Response Division			
DISAPPRO'	VAL:	Date:		
	George Pavlou, Director			
	Emergency and Remedial Respon	se Division		

Attachments:

Figure 1 - Site Location

Figure 2 - August 2001 Site Sample Location Map

Figure 3 - Proposed Excavation Area Map

Figure 4 - Hamilton Township Tax Map (House Number Plan)

Figure 5 - Demographic Statistics and Buffer Zones

Attachment 1 - RCMS Cost Projection

Attachment 2 - Confidential Enforcement Attachment

cc: P. Brandt, 2CD

G. Pavlou, 2ERRD

D. Karlen, 2ORC-NJSFB

A. Tao, 2OPM-GCMB

B. Sprague, 2ERR-RPB

R. Manna, 2OPM-FMB

M. Truono, 2ERR-RAB

B. Carr, 2ORC-NYCSFB

A. Madigan, EPA-R8-ORC

R. Van Fossen, NJDEP

G. Zachos, ERR-ACSM/O

B. Dease, 2ERR-RPB-TSS

J. Daloia, 2ERR-RPB-ERT

P. McKechnie, 20IG

T. Riverso, 2OPM-GCMB

C. Kelley, RST

C. Beasley, 5204G

A. Block, ATSDR

D. Mellott, 2ORC-NJSFB

J. Pasqualo, NJDHSS

J. Smolenski, NJDEP